

PATENT
Docket No.: ST00014USU1(107-US-U1)
09/910,092

AMENDMENTS

TO THE SPECIFICATION

Please amend the specification as follows:

Please replace lines 1-14 on page 9 with the following rewritten paragraph:

- - The present invention allows for a separate path for the signals 112 to reach the CPU 110. The signals 112, which are the same samples that are used in the correlator engine 108, are sent directly to the CPU ~~[[112]]~~110, or, optionally, through a buffer 114. Although the signals 112 can be sent directly to the same CPU ~~[[112]]~~110 for processing, which CPU is typically an ARM7, signals 112 can be sent to a separate Digital Signal Processor (DSP), or, alternatively, to a CPU ~~[[112]]~~110 that incorporates the DSP and ARM7 on a single integrated circuit (IC) chip. Further, the correlator engine 108, CPU 110, and optional buffer 114 can be on a single IC chip to allow for lower power consumption, smaller packaging of the system 100, etc. The RF downconverter 104 can also be integrated with correlator engine 108, CPU 110, sampler 106, and optional buffer 114 to provide a single IC chip system 100 if desired. Further, for ease of integration, CPU 110 can accept signals 116 and 118 at different ports, or signals 116 and 118 can be sent to separate CPUs 110, e.g., signals 116 can be sent to a DSP, while signals 118 can be sent to an ARM7. Other configurations ~~where~~having single or multiple CPUs 110 ~~[[can]]~~may be realized with the present invention. FIG. 1 is illustrative, but not exhaustive, of the possibilities of signal flow within the scope of the present invention.- -

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Please replace lines 3-6 on page 11 with the following rewritten paragraph:

- - The wireless transceiver 122 can accept data 130 from the GPS receiver system 100, as well as provide data 130 to the GPS receiver system 100. Data 130 accepted by the wireless transceiver 122 includes raw GPS data, pseudoranges, or a determined position. Data 130 provided by the wireless transceiver includes ephemeris information, time information, and coarse position information. - -

Please replace lines 9-13 on page 11 with the following rewritten paragraph:

- - System 200 shows RF signal 202 entering system 200, where it is decimated in decimate block 204. The result of decimate block 204 is the reduced bandwidth samples from RF signal 202, shown as block 206. These samples 208 are typically passed to a correlator engine 108 shown in FIG. 1. The local code 212 is then correlated against the incoming samples 208 in block 210, which [[is]]are then passed to the tracker 214 such that system 200 can track the RF input signal 202. - -

Please replace lines 13-20 on page 12 with the following rewritten paragraph:

- - Block 230 shows processing the stored data to determine whether the signal that has been tracked (or locked onto) in block 214 is the proper signal within the scanned signal window. In a cross-correlation situation, the proper signal can be determined by a correlation to a different satellite code being stronger than the correlation to a desired (or current) satellite code. In an auto-correlation situation, the proper signal [[can]]may be determined by a correlation to a

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different delay of the same satellite code being stronger than the correlation to the locally generated code delay. Decision block 232 shows that the system 200 verifies that the signal is or is not the proper signal, again, via SNR verification or other methods. - -